Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARTIN KESSLER

Appeal No. 1999-1998
Application 08/793,365

HEARD: JUNE 12, 2001

Before HAIRSTON, DIXON and GROSS, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 2, 5 and 8 through 10. In an Amendment After Final (paper number 14), claims 3, 4, 7 and 10 were amended. Claims 3, 4, 6, 7 and 11 through 18 have been allowed (paper number 17).

The disclosed invention relates to a circuit for operating a DC electric motor, and for detecting an increased

load state of the motor. The circuit produces a difference value between a predetermined nominal rpm value and an actual rpm value, and the difference value is then compared to a predetermined limit value. If the limit value is exceeded, the circuit emits an overload signal.

Claim 1 is the only independent claim on appeal, and it reads as follows:

1. An improved circuit for operating a DC electric motor, the circuit having an arrangement that produces a signal serving as a measure for the rpm of the electric motor and having a monitoring arrangement for detecting an increased load state of the electric motor, wherein the improvement comprises:

the monitoring arrangement (24) compares an rpm difference (N_D) between a predetermined nominal rpm value (N_{SOLL}) and the actual rpm determined from the actual rpm value signal (N_{IST}) to a predetermined limit value, and emits an overload signal (25) if the limit value is exceeded.

The references relied on by the examiner are:

Fassel et al. (Fassel)	4,514,670	Apr. 30, 1985
Iizawa et al. (Iizawa)	4,641,067	Feb. 3, 1987
Ishikura	5,317,244	May 31, 1994

Claims 1, 2, 5 and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fassel.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being

unpatentable over Fassel in view of Iizawa.

Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fassel.

Claims 1, 2 and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ishikura.

Reference is made to the final rejection, the briefs and the answer for the respective positions of the appellant and the examiner.

OPINION

We have carefully considered the entire record before us, and we will reverse all of the rejections.

Turning first to the 35 U.S.C. § 102(b) rejection of claims 1, 2, 5 and 8 based upon the teachings of Fassel, we find that Fassel discloses a DC motor 12 for extending and retracting antenna 13 (Figure 1). The current in motor 12 operates through brushes on a rotating commutator, and, therefore, motor current is wavy or undulating (column 4, lines 45 through 49). The frequency of the undulations is proportional to speed of the motor 12 (column 4, lines 50 through 53). A wave-shaping circuit 33 converts the noted undulations into pulses, and the pulses are counted by counter

C (column 5, lines 32 through 36). A reference value from C-Ref is thereafter compared with the counted pulses (column 5, lines 36 through 44).

Appellant argues (reply brief, pages 2 and 3) that the examiner has mistakenly concluded (final rejection, page 2) that 1/T1 is an actual rpm value, and that 1/1.5T1 is a nominal rpm value. In the absence of a convincing line of reasoning that explains how cycling time periods can be equated to rpm values, we agree with the appellant that "the words in claims are not simply empty vessels into which an Examiner can pour what he wishes from the prior art in order to meet the language of a claim" (reply brief, page 4). Stated differently, no amount of explanation by the examiner will convince us that time periods are the same as rpm values. Thus, the 35 U.S.C. § 102(b) rejection of claims 1, 2, 5 and 8 is reversed.

Turning next to the 35 U.S.C. § 102(b) rejection of claims 1, 2 and 8 based upon the teachings of Ishikura, we find that Ishikura discloses an AC motor control unit (Figure 1) in which a comparator 29 compares a reference voltage at its negative input terminal to a capacitor output voltage at

its positive input terminal. The comparator output is in turn connected to stator exciting coils 13 and 14 of AC motor 11 (column 5, lines 11 through 25).

The examiner is of the opinion (final rejection, page 4) that the two voltage inputs to the comparator are rpm values. Appellant argues (reply brief, page 5) that Ishikura discloses control of a two-phase AC motor, that the inputs to the comparator 29 are not rpm values, and that the output from the comparator is not compared to a limit value. We agree with appellant's arguments. Accordingly, the 35 U.S.C. § 102(b) rejection of claims 1, 2 and 8 is reversed.

The 35 U.S.C. § 103(a) rejection of claim 5 is reversed because the teachings of Iizawa do not cure the noted shortcomings in the teachings of Fassel.

The 35 U.S.C. § 103(a) rejection of dependent claims 9 and 10 is reversed because Fassel fails to disclose the monitoring arrangement of independent claim 1.

DECISION

All of the rejections of record are reversed. In summary, the decision of the examiner is reversed.

REVERSED

KENNETH W. HAIRSTON Administrative Patent Judge	)	
JOSEPH L. DIXON Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
ANITA PELLMAN GROSS Administrative Patent Judge	)	

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